

Critical Study of Teaching in Smart Classroom

¹Debasis Gan Chaudhuri and ²Dr. Vandana Bhatnagar

¹Research Scholar, Department of Education, Sri Satya Sai University of Technology & Medical Sciences, Sehore, M.P.

²Research Guide, Department of Education, Sri Satya Sai University of Technology and Medical Sciences, Sehore, M.P.

ARTICLE DETAILS

Article History

Published Online: 25 May 2019

Keywords

learning, smart classroom, technology, education.

ABSTRACT

A smart classroom is a technology-enhanced learning classroom, enhances the procedure of teaching and learning digitally. The classroom is integrated with the digital displays, tabs, whiteboards, assistive listening devices, and other audio/visual components that make lectures easier, engaging, and more interactive.

1. Smart Classroom

According to Educomp (2010), "Smart Class is educational software arrangement that provides unified communications and collaboration functionality for school level and Higher Education institutions. Smart Class provides an in-classroom theater-style experience for students to participate in online and live collaboration. The main aim of education is to preserve, transmit and advance knowledge. In the past this aim was achieved by the education system with the help of teachers, books, and some audiovisual aids. Nevertheless, the main drawback of the traditional classroom is that the main emphasis is on chalk and talk method. Also, traditional class rooms sometimes were uninteresting and boring. However, the use of various techniques, methods, media and approaches makes the teaching-learning process interesting, effective, goal-oriented, need based. Use of technology in class room instruction ensures coordination of working of "Head", "Eyes" and "Ears". It makes teaching interesting, effective and realistic. Now a day all disciplines become more scientific and for that an innovative concept of smart class room is introduced in the field of teaching-learning process.

In smart classroom there is an interactive white board i.e. smart board. The smart board is flat electronic screen that operates in compliance with computer and the "Data Show" device. The smart board has several names such as , smart board, interactive board, electronic board , digital board, interactive whiteboard . Thus, it is the innovative way of teaching focused on the main key skills: Knowledge acquisition, Knowledge imparting, knowledge creation and knowledge sharing. Smart class room is a digital initiative pioneered and invented technology that has already been adopted in India. This concept can be introduced in a thrilling and excited manner. Teaching in smart class room is transforming the way teacher teaches and a student learns in school. In this kind of teaching, teacher teaches through software and teaching material is shown to the students with projector in classroom. Smart class room teaching brings about a complete transformation in classrooms" (Educomp, 2010).

A Commerce instructor will demonstrate a video clipping of the share market on a wide screen to the class when demonstrating how a Share Market operates. He will illustrate the fine points of the operation, zoom in to demonstrate the

freezing of the related visuals and annotate when and when he wants to panic. All with engaging animations, colours, music, sounds and voice. Each child in the class receives absolute focus and interest from the teachers. Each infant provides a sensory perspective into how it works and the ideas are well understood and internalised. Every instructor presents a series of questions on a wide screen at the end of the class; each child in class gets ready to answer the questions. This results in a quicker and more precise interpretation of class topics and tends to boost students' overall academic success. Teachers are able to keep students interested in the learning process and also get an immediate and reliable evaluation at the end of the lesson of the learning results obtained.

In school and college campuses and laboratories, a modern wave of high-tech classrooms is becoming a requirement where it is convenient for faculty to display computational or video output to a room full of students. More and more faculty on their own computers build text, video, maps and graphics and find it beneficial for this content in the classroom. The aim of the Smart Classroom is to make the use of computers as easy, friendly and non-intimidating as possible in the classroom. Installations must work well, but remain accessible, to the faculty. The front core of the room has to accommodate chalkboards, overhead projectors, computers, as well as walking space for pacing professors, and open space for exhibits and tests, as classrooms/lecture halls can continue to be used for conventional teaching. For student note taking, sufficient light is needed. On the screen and on the chalkboard, ample light is necessary. To mitigate the washing out of the image on the projector while not hindering the student's view towards the screen, all light fixtures must be located and controlled (Shelf 2000)

According to Perret (2008) of Pierce College, "A smart classroom is a classroom that has an instructor station equipped with computer and audio-visual equipment, Personal Computer, Overhead Projector, Wireless Internet Access, Digital Versatile Disk Player, Smart Board".

1.1. Teaching in smart classroom

Classroom teaching for teaching with the assistance of instruments and gadgets accessible in a classroom fitted with technology. There is a need for access to outside teaching

services in technical classrooms. It is possible to communicate in real time with remote computers and workstations, databases or banks of stored text and images via telephone lines, Ethernet connections or Internet access installations. The above-mentioned situation is known as the Smart Classroom in schools. The Smart Classroom is an advanced instruction, learning, collaboration, appraisal and teaching management framework for students. For efficient lesson delivery and resource collection, the framework combines information, connectivity, and teaching management tools. It is planned and designed for teachers to be user-friendly in producing multimedia lessons.

Teachers can use all multimedia modules in the smart classroom, such as videos and displays, and these visually enticing instructional approaches are attractive to students who are still struggling in a classroom with the conventional teaching system. In reality, smart classes are more like watching films, as animated graphics are often used to teach a point. This kind of graphic is both eye-catching and can easily be associated with by young students. This is because students' audio-visual senses are targeted and it allows students to store information easily and more efficiently. In drawing or preparing diagrams on board, there is the value of using more of the time lost earlier. All this material is stored in memory via smart boards and can be displayed during class lectures and therefore the time saved can be used in more meaningful items. Any learners and instructors have chalk dust issues and appear to suffer from allergic reactions. The smart boards rescue themselves from such pain and later do not develop any health conditions. Smart schools, virtual whiteboards, or video/media devices such as a Multimedia Versatile Disc Player and Television hybrid have replaced conventional whiteboards or flipcharts. Although where conventional boards are used, the Virtual Whiteboard also complements them by linking the digital video delivery channel to a school network. In other instances, virtual white boards (IWBs) communicate with collaborative annotation and drawing experiences online, such as graphical websites focused on interactive vectors. This will help transform instruction and training.

The new form of technology is the smart classroom. A drastic improvement in individual focus that the teacher is willing to give each child is some of the advantages of this revolutionary technology/methodology. The use of technology brings crucial improvements in knowledge learning, memory, recall, thought and logic, engagement in activity, creativity, improved assimilation and comprehension.

One of the main benefits of a smart classroom is that there will be more opportunities for the teacher. It increases the quality and effectiveness of teachers in the classroom, makes learning an enjoyable activity for students, improves motivation, paves the way for personality development, student active engagement, improves learning, retention and student success, and improves student academic achievement. It allows immediate formative measurement of learning outcomes in the classroom and also allows teachers to immediately evaluate and assess their student's performance in the classroom.

In saving the instructor's time and effort, the smart classroom differs from other traditional classrooms in the same group, focusing on the quality of the instructional programme,

displaying curriculum topics in an engaging and enticing manner, leading to overcoming some of the chalkboard challenges, including an aspect of movement in the.

1.2. Benefits of smart classroom

Niemeyer (2003) explained the benefits of Smart Classroom as;

1. readymade lessons available
2. provide ideas for teaching
3. instant teaching aids (attractive and/or animated)
4. model voice -overs / pronunciation of words, sentences or passages
5. allows customization of lessons
6. user-friendly tools to support teachers
7. modern multimedia presentations
8. able to incorporate third party contents
9. prepared lessons can be stored and shared
10. allows one-teacher-two-class teaching
11. interactive communication between two or more classes
12. administrators can fix curriculum / lesson strategies

Smart Classroom is the e -solution to traditional problems in teaching. It is the tool for planning, implementing and enhancing teaching in class (Foradian 2013). In an electronic world, this enables teaching and learning to be done. Electronic material (audio, video, text, graphics and animations), materials, ideas and tool support are given by Smarts Classroom. At every moment, Smart Classroom material is upgradeable and expendable.

- Smart Classrooms will boost presentation and content
- Teaching students to use soft copies of books supplied on the internet by the Central Committee of Secondary Education and the National Council for Education Study and Training.
- Students react well to video clips that demonstrate a concept: YouTube
- PowerPoint demonstration that reviews the lesson's key topics.
- With the desktop of the machine being projected, suitable Internet pages will bring variation to any tutorial.
- Empowering pupils
- Presentation by students using PowerPoint
- Show and discuss their assignments
- Bring in experts using Skype or CCC (Close Circuit Camera) Link video conferencing.
- A specialist on the market is willing to clarify securities and debentures.
- A Civil War specialist will enliven a history class

English class could interact with the poetry author they are reading;

A moot court rivalry with another school will be held by the political science class

The fact that this kind of curriculum is ideal for all kinds of students is one of the key factors behind the steady rise in the popularity of smart classes. A classroom has students with different forces of comprehension and learning, and some students find it challenging to prepare from notes and other content. But for all students, the use of smart classrooms and

new technologies makes the learning process simpler. In comparison, this kind of classroom curriculum encourages greater teacher-student engagement and more involvement from both sides.

References

1. Alessi, S. M, & Trollop S. R. (1985). Computer-based instruction: Methods and development. New Jersey: Prentice Hall.
2. Aggarwal, J.C. (2007). Essentials of Educational Psychology. (2nd Ed). New Delhi, Vikas Publishing house.
3. Aggarwal, Y.P. (2002). Statistical method concept, application and computation. New Delhi. Sterling publishing House.
4. Aggarwal, Y.P. (2007). The Science of Educational Research. Kurukshetra. Nirmal book Agency.
5. Akbas, O., & Pektas, H. M. (2011). "The effects of using an interactive whiteboard on the academic achievement of university students". Asia-Pacific Forum on Science Learning and Teaching ,12(2), 13.
6. Alamshah, (1972). Blockage to Creativity. Journal of Creativity Behaviour, 11(4), 154-163.
7. American Heritage Dictionary (4th ed.) (2009). United States: Houghton Mifflin Company.
8. Amible, T. M. (1989). Growing up creativity. New York: Crown Publishers
9. Anderson, L.W. (1973). Teacher Morale and Student Achievement. Journal of Education Review, 461.